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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/609,161	06/26/2003	Muneyoshi Ikeda	03369/LH	7860

1933 7590 09/22/2005

FRISHAUF, HOLTZ, GOODMAN & CHICK, PC  
220 5TH AVE FL 16  
NEW YORK, NY 10001-7708

EXAMINER
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LOPEZ, FRANK D

ART UNIT	PAPER NUMBER
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3745

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/609,161

Applicant(s)

IKEDA ET AL.

Examiner

F. Daniel Lopez

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on August 25 and July 19, 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 9-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 9-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 25 and July 19, 2005 has been entered.

Applicant's arguments with respect to claims 9-12 have been considered but are deemed to be moot in view of the new grounds of rejection.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 103***

Claims 9-12, are rejected under 35 U.S.C. § 103 as being unpatentable over Morishita in view of Mibu et al and Arai et al. Morishita discloses a swing control apparatus comprising a working machine (7) attached to a portion of a connected machine (4) by upper and lower swing pins separated along a vertical axis (P1); a swing angle detector (30) for detecting a swing angle of the working machine, disposed along the vertical axis (e.g. column 6 line 51-53); a hydraulic actuator (9, 10) swingingly drives the working machine; wherein an electromagnetic proportional operation valve (19) controls the flow rate of pressure oil supplied to the actuator; wherein a controller outputs a speed reduction command (see e.g. fig 6, 7 or 10), to reduce the swing speed gradually from a position of a predetermined angle short of the stroke end of the swing toward the stroke end, based on the swing angle signal from the swing angle detector, to the operation valve; but does not disclose that the swing angle detector is provided at a lower end portion of the upper swing pin; that there is proportional electromagnetic valves capable of controlling pilot pressure for operating the operation valve, where in the controller outputs the speed reduction command to the proportional electromagnetic

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valves; or that there is a swing speed detecting means for detecting a swing speed, based on the signal from the swing position sensor; wherein the swing speed reduction starting position is determined based on the swing speed.

The examiner understands that the claimed swing control apparatus includes a working machine attached to a portion of a connected machine by a swing pin, and that the details of the connected machine (i.e. that it has a revolving superstructure) is intended use and therefore is not given patentable weight. If applicant intends that the details of the connected machine be a part of the claimed invention and the claims are so modified; the claims would not be allowed based on a 103 rejection, using Morishita and another reference, such as Japan 63206535.

Since the swing angle detector of Morishita is provided along the vertical axis of the swing pin, it must be provided either at an upper or lower end portion of the upper swing pin, or at an upper or lower end portion of the lower swing pin. Since providing the swing angle detector at either an upper end portion of the upper swing pin, or a lower end portion of the lower swing pin would place it in danger of being damaged by things falling onto it or being thrown up into it, respectively, one having ordinary skill in this art would place the swing angle detector of Morishita at either a lower end portion of the upper swing pin, or at an upper end portion of the lower swing pin, to protect it from damage. Since this includes the swing angle detector being provided at a lower end portion of the upper swing pin, it meets the limitation of claims 2, 4, 6 and 8.

Official notice is taken, for valves controlling flow to a hydraulic actuator, that a variety of valves are functionally equivalent to each other, including an electromagnetic proportional operation valve and proportional electromagnetic valves controlling pilot pressure for operating a pilot operated operation valve. Since an electromagnetic proportional operation valve and proportional electromagnetic valves controlling pilot pressure for operating a pilot operated operation valve are functionally equivalent in the hydraulic actuator art, it would have been obvious at the time the invention was made to one having ordinary skill in the art to replace the electromagnetic proportional operation valve of Morishita with proportional electromagnetic valves controlling pilot pressure for operating a pilot operated operation valve, as a matter of engineering expediency.

Mibu et al teaches, for a fluid actuator (1) including a position detector (8) for detecting a position of the actuator; wherein an electromagnetic proportional operation valve (13, 17, 18) controls the flow rate of fluid supplied to the actuator; wherein a controller outputs a speed reduction command, to reduce the speed gradually from a speed reduction position (X1), at a predetermined value short of the stroke end toward the stroke end, based on the position signal from the position detector, to the operation valve; that the speed reduction starting position is determined based on a speed of the actuator (inherently, to follow the ideal speed reduction curve, the speed reduction position must be calculated based on actual speed), for the purpose of following an ideal speed reduction curve (fig 2a-2c, column 5 line 29-37).

Since Morishita and Mibu et al are both from the same field of endeavor, the purpose disclosed by Mibu et al would have been recognized in the pertinent art of Morishita. It would have been obvious at the time the invention was made to one having ordinary skill in the art to determine the speed reduction starting position of Morishita based on a speed of the actuator, as taught by Mibu et al), for the purpose of following an ideal speed reduction curve.

Arai et al teaches, for a fluid actuator (2) including a position detector (12) for detecting a position of the actuator, with a speed detecting means for detecting a speed; that the speed detecting means calculates the speed, based on the signal from the position sensor.

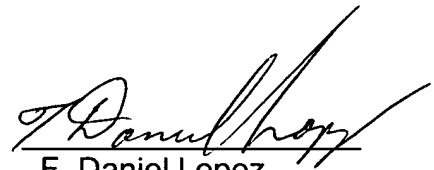
Since the modified Morishita does not disclose how a speed is calculated and Arai et al does; it would have been obvious at the time the invention was made to one having ordinary skill in the art to calculate the speed of the modified Morishita using a speed detecting means which calculates the speed, based on the signal from the position sensor, as taught by Arai et al, as a matter of engineering expediency.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dan Lopez whose telephone number is 571-272-4821. The examiner can normally be reached on Monday-Thursday from 6:15 AM -3:45 PM. The examiner can also be reached on alternate Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Look, can be reached on 571-272-4820. The fax number for this group is (703) 872-9302. Any inquiry of a general nature should be directed to the Help Desk, whose telephone number is 1-800-PTO-9199.

A handwritten signature in black ink, appearing to read 'F. Daniel Lopez', is written over a horizontal line.

F. Daniel Lopez  
Primary Examiner  
Art Unit 3745  
September 19, 2005